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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/059,682	01/29/2002	Mario E. Bran	VERTE.076A	5570

34132 7590 07/27/2005

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1900 MARKET STREET  
PHILADELPHIA, PA 19103-3508

EXAMINER
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STINSON, FRANKIE L

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/059,682

Applicant(s)

BRAN

Examiner

FRANKIE L. STINSON

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-6 and 8-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13 and 15-19 is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,9,12,14 and 20 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. The indicated allowability of claims 11, 14 and 20 is withdrawn in view of the newly discovered reference(s) to Barbee et al. (U S. Pat. No. 4,070,167), Satoh (U. S. Pat. No. 5,746,981) Japan 8-318234. Rejections based on the newly cited reference(s) follow.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-6, 8, 9, 11, 12, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lauerhaas et al. (U. S. Pat. No. 6,754,980) in view of Japan'234, Satoh or Barbee et al.

Re claims 1, 11 and 14, Lauerhaas is cited disclosing an assembly for cleaning a thin substrate comprising:

a transmitter (122) positioned above the substrate where a meniscus of liquid is formed between the substrate and transmitter;

a transducer coupled to the transmitter to create a transmission path from the transducer through the substrate that differs from the claims only in the recitation of the at least one of (1) a gap in the transmission path between the transducer and end face of the transmitter, and (2) a recess in the end of the transmitter. The patents to Japan'234, Satoh and Barbee are each cited disclosing a transmitter being coupled to a transducer, where there is provided at least one of a gap (see fig. 1 in Japan'234, see fig. 11 in Satoh, and see fig. 2 in Barbee) in the transmission path between the

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transducer and end face of the transmitter, and (2) a recess in the end of the transmitter. It therefore would have been obvious to one having ordinary skill in the art to modify the transmitter in Lauerhaas, to be as taught by either Satoh or Barbee for the purpose of providing efficient transmission of wave energy to the transmitter. Re claims 11 and 15, note that Barbee discloses the coupler (bottom part of housing 43). Re claim 20, in view of the corresponding structure, the functional limitations are deemed to be inherent. Re claims 2, Lauerhaas discloses the alignment. Re claims 4 and 9, Lauerhaas discloses the elongated/rod configuration. Re claims 5 and 6, Lauerhaas discloses the liquid source/dispenser. Re claim 8 to have the recess wedge-shaped is deemed to be an obvious matter of design in that the gap as claimed in that the wedge-shaped recess is deemed to the mere substitution of equivalents (see MPEP 2144.06 SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE). This also applicable to the coupler as claimed in claim 12.

4. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 13 and 15-19 stand allowed.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nicoloso et al., Beck et al., Sawyer, Loose et al. and 6,336,976, note the transmitters.

7. Applicant's arguments with respect to claims 1, 2, 4-6 and 8-20 have been considered but are moot in view of the new ground(s) of rejection.

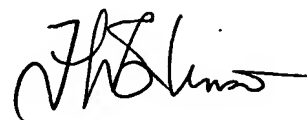
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANKIE L. STINSON whose telephone number is (571) 272-1308. The examiner can normally be reached on M-F from 5:30 am to 2:00 pm and some Saturdays from approximately 5:30 am to 11:30 am.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached on (571) 272-1700. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

fls



FRANKIE L. STINSON  
Primary Examiner  
GROUP ART UNIT 1746